

aatttgttta caacatacat tactttgtt ttttaggcaa gataaaatnt cctacctcca 120
aaaccaccag cacngtccgc aataactata catc 154

<210> 4
<211> 301
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (217)..(217)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (298)..(298)
<223> n = a, c, t, or g

<400> 4
aatatccatc ttcacccacg ttatacataa gagaccagaa tggatattg tcatctcaca 60
tggaaaaatc tgctgtgatc agttcctgaa gcttgctgt atcctccctt aggaaagttag 120
aaaaatcttt ttgaaacact ttattctaca atcaatgaaa attaggtgaa gctacagaag 180
ccagaaattt ctctaagatt agacaattat ttaagangac caattgtctt tggcttctt 240
ctgaagggtc tgactaccct cctccaaaga attcaactggc cgtcggttta caacgtcngt 300
a 301

<210> 5
<211> 191
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (11)..(11)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (17)..(17)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (62)..(62)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (162)..(162)
<223> n = a, c, t, or g

<400> 5
ggagggtt ntcacanaag tctgggtgc gctgtgtgt tcattgtaaa aacccttgg 60
ancatctggg aatgtgctgc cccacatgtc caggtAACGT tctcaggaag gggaggctgg 120
aatctctgt gtgttcttac aggaatgcat gaaatctccc ancccttctt gttggaaattt 180
tccctcactt t 191

<210> 6
<211> 253

<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (7)..(7)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (12)..(12)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (217)..(217)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (250)..(250)
<223> n = a, c, t, or g

<400> 6
cttctcnatg antggacaaa tgtcattggg tcagcatgag gcacagctta ccagttcaga 60
ttccagtagc tgaggaacaa atcttaactc caaaaataag taattgcgtc actttggagg 120
aattatttga cctttcata actttgacat cacaacaatg agggtgaagt tagaaaata 180
aatgattatt atgaggataa aatgagaaaa tgaatnagt gcttaagaca atgcttgta 240
actagttaan ccg 253

<210> 7
<211> 153
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (4)..(4)
<223> n = a, c, t, or g

<400> 7
ggtnnttcac ttggttggtt aacattactt ctaagttttt tattgtttt tatgctattg 60
ctaattggat tgctttctta atttattttt tccaaatagct tgttgttagt ttatatcaa 120
tgcaactgtt tttctatgca aattatgttt cct 153

<210> 8
<211> 238
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (130)..(130)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (141)..(141)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (176)..(176)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (235)..(235)
<223> n = a, c, t, or g

<400> 8
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tctccgtgtg gacataattt tccagttcat ttgggtaaaa cccaaaggag cacaactgtt 120
ggatcctatn ataaaaatat ntctcggttc attaaaaaaaaa cctgggaaac tatctnccca 180
cagtggctgt cccttttgt atccccacca acaatgttgg aaagcctatt gccancat 238

<210> 9
<211> 182
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (5)..(5)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (72)..(72)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (86)..(86)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (106)..(106)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (130)..(130)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (145)..(145)
<223> n = a, c, t, or g

<400> 9
catgnctcac agtgttctga ggctgctctg gacatgcaat cttgcattgt tttgtcatga 60
caggctttaa anagtttatac agcttnctca aatagctgaa tgacanaaca ctggattttt 120
gttcaaatan cctatcaact tggcattctgt gttgcgggtt tcacttggta acaaaataag 180
tc 182

<210> 10
<211> 259
<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (29)..(29)

<223> n = a, c, t, or g

<220>

<221> unsure

<222> (122)..(123)

<223> n = a, c, t, or g

<220>

<221> unsure

<222> (146)..(146)

<223> n = a, c, t, or g

<220>

<221> unsure

<222> (192)..(193)

<223> n = a, c, t, or g

<220>

<221> unsure

<222> (213)..(213)

<223> n = a, c, t, or g

<400> 10

taattgacaa ataaaaattg tatatttnc atatthaaca tgttatgcta acatataatat 60
ggattgtgga atgcttaatc cagaaattct tttacattca tatttccata ttatttactt 120
tnngctttaa aaaatatgt aatganaata ctatatttt tcagtgac tgccttgata 180
ctttcacatt tnngttacat attatttccc ttncatctaa caaatatata ttgagtttct 240
ataatgtgtc tgacactga 259

<210> 11

<211> 195

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (90)..(90)

<223> n = a, c, t, or g

<400> 11

tggtcactgg tgccttattt ggtttgtttg ctgaggtcat atttcctgtg gccttcatgc 60
ttgatttgtt ggagtctagc catgtaaaan tctgttggag tctaggcatt taaaaaatag 120
gtatatttttgc taatcttgc catttgcatttgc tttgtatccca tccttcttgg gaaggctta 180
caggcattca aaagg 195

<210> 12

<211> 656

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (556)..(556)

<223> n = a, c, t, or g

<220>
<221> unsure
<222> (566)..(566)
<223> s = g or c

<220>
<221> unsure
<222> (590)..(590)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (610)..(610)
<223> n = a, c, t, or g

<400> 12
gccaacaaac aaaatgaaat aagacctggg atgtatTTT tggccaaggc aattagaaaa 60
tgatttagtat ccttattcagg agcaattca gagaatgtt gggTggacgt ctaactacag 120
tggagtcaaa cgtaatcaa cggtaaaaaa aggacaatag ccaatgtta cacttttat 180
aaaaaccacc ctccaaggac caggcactgg ccctctctcc ggtgcccaca gacatccaca 240
caggcccaaa gaatcaggga ttgcacaaggc cagagcaatc gaacggttct gagtcatctg 300
ccggaaggct tgccctcaat caaggcggac gtgaaggcatc tacaaaggag gaatagtcaa 360
agcagcagcg gcggcggcgg cggcggcagc agcagcagca gcaggaggtg ggggcctctg 420
ccaggtaccg ggcccccccg gcacggaggt gcccaggttc cccggaggc caccctttcc 480
ctggagtgcg tgagagaggg gaagggagga aggccagagc aggaatcaga gcgaggcaaa 540
ggcgggcaagg aactangaga atgacsgcgg gaggcggccg gaaaaaaaan tctcggggct 600
gtgggggtcn ccctggcacc agccgggtc ccaagccccca ccgcgagacc ccgcga 656

<210> 13
<211> 22
<212> DNA
<213> Homo sapiens

<400> 13
atcgaacggt tctgagtcat ct 22

<210> 14
<211> 19
<212> DNA
<213> Homo sapiens

<400> 14
cgctctgatt cctgctctg 19

<210> 15
<211> 546
<212> DNA
<213> Homo sapiens

<400> 15
ttcagtagaa ggaaggcacag caaatttgc tttatagaga ttcaattctt ggtgcttggg 60
ccaaagaata agaattacat taagcaggcc gggcacggtg gctcacacct gtaaaaaccag 120
aactttggga ggccggaggca ggcagatcat gaggtcagga gatcgagacc atcctggaca 180
acatagtgaa accccatctc tactaaaaat acaaaaatta gccgggcattt gtgggtgcatt 240
cctgtatcc cagctactca ggaggcggag gcaggagaat cccttgaacc agggagttgg 300
aggttgcattt gagccgagat cacgcccacag cactctagcc tggcgacaga gtgagactcc 360
atctcaaaaa aaaaaaaaaa aaaaaaaaaa ttacattaag cagcagcagc agcagtgas 420
gagggaaakaa tgaaaagaaga aatttctaga ataagattga tctccagcac catgccaatc 480
atggacttggaa tacaattcat gcatatctt tttttttt gttttttt gttttttt tttttttt 540
ctcatt 546

<210> 16
<211> 22
<212> DNA
<213> Homo sapiens

<400> 16
agaaggaagc acagcaaatt tg 22

<210> 17
<211> 20
<212> DNA
<213> Homo sapiens

<400> 17
gcatggtgct ggagatcaat 20

<210> 18
<211> 573
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (28)..(28)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (74)..(74)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (92)..(92)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (97)..(97)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (100)..(100)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (100)..(123)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (132)..(132)
<223> s = g or c

<220>
<221> unsure
<222> (133)..(133)

<223> k = g or t/u

<220>

<221> unsure

<222> (162)..(162)

<223> k = g or t/u

<220>

<221> unsure

<222> (171)..(171)

<223> k = g or t/u

<220>

<221> unsure

<222> (422)..(422)

<223> r = g or a

<220>

<221> unsure

<222> (443)..(443)

<223> k = g or t/u

<220>

<221> unsure

<222> (482)..(482)

<223> s = g or c

<220>

<221> unsure

<222> (551)..(551)

<223> y = t/u or c

<400> 18

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catctggca ggcngatgtt ccttccatct tngaagnacn gtcctttca tttttttat 120
ttncttttg gsktttatct tcttagacgt cttcaggagt tkgattgtag kgtaaggcag 180
attttagttga ctgggcttg tttctggaaa atttaaagg ggcaagtccct gggctgcata 240
ttcttactct gggggcttag tactggcccc taaatttgtt ctctgctcc tcaaggtag 300
aaatctgctg gctggagggg ctgagatgtt ctttgactgc tggccagaac attccgcgg 360
gggggtggcaa ccgaagtgtt tctttggca atggcagcag aattcatgat tggtttcatg 420
trccagcagc agtggcagcg caktgagttt catgattgtt ggctgggct gagtgctggc 480
asgcactgga gtgtttggct tccagtagaa attcacagca gtagtagtgg tggcatggga 540
aggagggcag yggtggcatg gggaggaccc ccc 573

<210> 19

<211> 22

<212> DNA

<213> Homo sapiens

<400> 19

ggctgagatg ttccttgact gc

22

<210> 20

<211> 22

<212> DNA

<213> Homo sapiens

<400> 20

ccttcccatg ccaccactac ta

22

<210> 21
<211> 597
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (67)..(67)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (95)..(95)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (151)..(151)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (425)..(425)
<223> s = g or c

<400> 21
tgtaattccc agcaatttgg ggagcccaag gcgggcagat tcatgagttc gggaaaggattc 60
gagaccnnttc ctggctaaac acggggaaa ccccnnntttt actaaaaaaat accaaaaaaat 120
taacctgggc gtggtggcgg gccccagcta ntccggaggc tgaggcagga gaatgggttg 180
aaccggggag gcggagcttg cagtggccg agatcccgct actgcactcc agcctggca 240
atagagggag actccgtctc aaaaaaaaaa aaaaataaaat aataataaaaaaaaataaaca 300
taataataact aataattgct tgatattta caaaagcaaa aggaaaagaa gactaggcaa 360
aaaaaaaaaa acctcccttag atggtagaac tcaggtttaa aattaaaact tattctggtg 420
tcagsctagt tgtatatttt gacctctta aatgctctga actatgatat ggagtaacag 480
cgatgctgct gctgctgctg ctgctgctga tgggtgggt gtttaatat cgaataaaaag 540
ttgtggaaac taaatttcat ttctgccaat taactaagat tgcaaagtta aacatct 597

<210> 22
<211> 22
<212> DNA
<213> Homo sapiens

<400> 22
tttgcatact tagttatttgc 22

<210> 23
<211> 24
<212> DNA
<213> Homo sapiens

<400> 23
gaactatgat atggagtaac agcg 24

aaaaatcttt ttgaaacact ttattctaca atcaatgaaa attaggtgaa gctacagaag 180
ccagaaatta ctctaagatt agacaattat ttaagangac caattgtctt tggtcttctt 240
ctgaagggtc tgactaccct cctccaaaga attcaactggc cgtcgttta caacgtcntg 300
a

<210> 5
<211> 191
<212> DNA
<213> Homo sapiens

<400> 5
ggagggtgtt ntcacanaag tctgggtgc gctgtgttgt tcattgtaaa aaccctttgg 60
ancatctggg aatgtgctgc cccacatgtc caggtaacgt tctcaggaag gggaggctgg 120
aaatctctgt gtgttcttac aggaatgcat gaaatctccc anccctctt gttggaaatt 180
tccctcactt t 191

<210> 6
<211> 253
<212> DNA
<213> Homo sapiens

<400> 6
cttctcnatg antggacaaa tgtcatggg tcagcatgag gcacagctta ccagttcaga 60
ttccagtagc tgaggaacaa atcttaactc caaaaataag taattgcgtc actttggagg 120
aattatttga cctttcata actttgacat cacaacaatg agggtaagt tagtaaaaata 180
aatgattatt atgaggataa aatgagaaaa tgaattnagt gcttaagaca atgcttgta 240
actagttaa ccg 253

<210> 7
<211> 153
<212> DNA
<213> Homo sapiens

<400> 7
ggtnnnac ttgggtgggtt aacattactt ctaagttttt tattgtttt tatgctattg 60
ctaattggat tgctttctta atttattttt tccaatagct tgggttagt ttatataaaa 120
tgcaactgtt tttctatgca aattatgttt cct 153

<210> 8
<211> 238
<212> DNA
<213> Homo sapiens

<400> 8
ttgggtggc cctaggtttg gcaattataa ataaagctgc tacaaacatt catgtgcagg 60
tctccgtgtg gacataattt tccagttcat ttgggtaaaa cccaagggag cacaactgtt 120
ggatcctatn ataaaaatnt ctgcgttca attaaaaaaa cctgggaaac tatctnccca 180
cagtggctgt cccttttgtt atccccacca acaatgtgg aaagcttatt gccancat 238

<210> 9
<211> 182
<212> DNA
<213> Homo sapiens

<400> 9
catgnctcac agtgttctga ggctgctctg gacatgcaat cttgcattgt tttgtcatga 60
caggtcttaa anagtttac agcttnctca aatagctgaa tgacanaaca ctggattttt 120
gttcaaatan cctatcaact tggcncgtt gttgcgggttgc tcacttgta acaaaaataag 180
tc 182

<210> 10

<211> 259
<212> DNA
<213> Homo sapiens

<400> 10
taattgacaa ataaaaattg tatattttnc atatthaaca tgttatgcta acatataatat 60
ggattgtgga atggctaagt cagaaattct ttacattca tatttccata ttatttactt 120
tnngcttaa aaaatatgt aatganaata ctatTTTT tcagtgtcac tgccttgata 180
ctttcacatt tnngttacat attatttccc tncatctaa caaatatata ttgagttct 240
ataatgtgtc tgacactga 259

<210> 11
<211> 195
<212> DNA
<213> Homo sapiens

<400> 11
tggtcactgg tgccttattt ggTTTgtttg ctgaggtcat atttcctgtg gccttcatgc 60
ttgatttgtt ggagtctagc catgtaaaan tctgttggag tctaggcatt taaaaatag 120
gtatTTTTTg taatcttgc catttgcttg tttgtatcca tccttcttgg gaaggcttta 180
caggcattca aaagg 195

<210> 12
<211> 656
<212> DNA
<213> Homo sapiens

<400> 12
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tgatttagtat ccttattcagg agcaatttca gagaatgtt gggtggacgt ctaactacag 120
tggagtcaaa cgtgaatcaa cggtgaaaaa aggacaatag ccaatgtgt acaTTTTTat 180
aaaaaaccacc ctccaaggac caggcactgg ccctctctcc ggtgccacaca gacatccaca 240
caggccccaa gaatcaggga ttgcacaagc cagagcaatc gaacggttct gagtcatctg 300
ccggaaggcct tgcctcaat caaggcggac gtgaagcatc tacaaaggag gaatagtcaa 360
agcagcagcg gcggcggcgg cggcggcagc agcagcagca gcaggaggtt ggggcctctg 420
ccaggtaccc ggcggggcagc gcacggaggt gccagggtt ccgcggaggc caccctttcc 480
ctggagtgcg tgagagaggg gaaggggagga aggccagagc aggaatcaga gcgaggcaaa 540
ggcggggcagg aactaxgaga atgacsgcgg gaggcggcccg ggaaagaaaax tctcggggct 600
gtgggggtcx ccctggcacc agccggggtc ccaagccccca ccgcgagacc ccgcg 656

<210> 13
<211> 22
<212> DNA
<213> Homo sapiens

<400> 13
atcgaacggt tctgagtcat ct 22

<210> 14
<211> 19
<212> DNA
<213> Homo sapiens

<400> 14
cgctctgatt cctgctctg 19

<210> 15
<211> 546
<212> DNA
<213> Homo sapiens

<400> 15
ttcagtagaa ggaagcacag caaatttgcc tttatagaga ttcaattctt ggtgcttggg 60
ccaaagaata agaattacat taagcaggcc gggcacggtg gctcacacct gtaaaaaccag 120
aactttggga ggccgaggca ggcagatcat gaggtcagga gatcgagacc atcctggaca 180
acatagtgaa accccatctc tactaaaaat acaaaaatta gccgggcattg gtgggtgcattg 240
cctgtaatcc cagctactca ggaggcggag gcaggagaat cccttgaacc agggagttgg 300
agggtgcagt gagccgagat cacgccacag cactctagcc tggcgacaga gtgagactcc 360
atctcaaaaa aaaaaaaaaa aaaaaaaaaa ttacattaag cagcagcagc agcagtgasa 420
gagggaaakaa tgaaagaaga aatttctaga ataagattga tctccagcac catgccaatc 480
atggactgga tacaattcat gcatatctt tgtgagagag gtgagagatg tgaatcctt 540
ctcatt 546

<210> 16
<211> 22
<212> DNA
<213> Homo sapiens

<400> 16
agaaggaagc acagcaaatt tg 22

<210> 17
<211> 20
<212> DNA
<213> Homo sapiens

<400> 17
gcatggtgct ggagatcaat 20

<210> 18
<211> 573
<212> DNA
<213> Homo sapiens

<400> 18
tgggagttaa agcagacatt cggcttngt gttgccagag ttctaacata agttctttt 60
catctggca ggcngatgtt cttccatct tngaagnacn gtcctttca ttttttttat 120
ttngctttg gsktttatct tcttagacgt cttcaggagt tkatgttag kgtaaggcag 180
attttagttga ctgggctttg tttctggaaa attttaaagg ggcaagtcct gggctgcata 240
ttcttactct gggggcttag tactggcccc taaatttggt ctctggctcc tcaaggtag 300
aaatctgtcg gctggagggg ctgagatgtt cttgactgc tggccagaac attccgccc 360
gggggtggcaa ccgaagtgtt tcttggca atggcagcag aattcatgt tgttttcatg 420
trccagcagc agtggcagcg caktgagttt catgattgtt ggctggggct gagtgctggc 480
asgcactgga gtgtttggct tccagtagaa attcacagca gtagtagtgg tggcatggga 540
aggagggcag yggtggcatg gggaggaccc ccc 573

<210> 19
<211> 22
<212> DNA
<213> Homo sapiens

<400> 19
ggctgagatg ttccttgact gc 22

<210> 20
<211> 22
<212> DNA
<213> Homo sapiens

<400> 20
ccttcccatg ccaccactac ta 22

<210> 21
<211> 597
<212> DNA
<213> Homo sapiens

<400> 21
tgtaattccc agcaatttgg ggagcccaag gcgggcagat tcatgagttc gggaaagattc 60
gagaccnttc ctggctaaac acggggaaa ccccnntttt actaaaaaat accaaaaaat 120
taacctgggc gtggtggcgg gccccagcta ntccggaggc tgagggcagga gaatggtgtg 180
aacccgggag gcggagctt cagtgagccg agatcccgct actgcactcc agcctggca 240
atagagggag actccgtctc aaaaaaaaaa aaaaataaaat aataataaaa aaaataacaa 300
taataatact aataatttgc tgatattttt caaaagcaaa aggaaaaagaa gactaggcaa 360
aaaaaaaaaa acctcccttag atggtagaaac tcaggttaa aattaaaact tattctggtg 420
tcagsctagt tgtatatttt gacctcttta aatgctctga actatgatat ggagtaacag 480
cgatgctgct gctgctgctg ctgctgctga tgggtgggt gtttaatat cgaataaaaag 540
ttgtggaaac taaatttcat ttctgccaat taactaagat tgcaaagttt aacatct 597

<210> 22
<211> 22
<212> DNA
<213> Homo sapiens

<400> 22
tttgcaatct tagttaatttgc

22

<210> 23
<211> 24
<212> DNA
<213> Homo sapiens

<400> 23
gaactatgat atggagtaac agcg

24